

REMARKS

Claim 1 is pending in the present application, claims 2-10 having been canceled. The Examiner rejected claim 1 under 35 U.S.C. §112, 1st paragraph, 35 U.S.C. §112, 2nd paragraph, and 35 U.S.C. §103(a). Applicant has added new claim 11. No new matter is introduced.

Section 112, paragraph 1 Rejections:

Claim 1 was rejected under 35 U.S.C. §112, 1st paragraph, for failing the enablement requirement. The Examiner alleged that the drawings were confusing and unclear, and that reference characters in the specification were not found in the drawings. The Examiner also does not understand the relationship between FIGS. 1 and 5.

Applicant has amended FIGS. 1, 4, 5 and 7, and the corresponding text in the specification. Specifically, FIG. 1 was amended to include labels I_1 and I_2 to identify image planes, and the corresponding text on pages 3 and 4 was amended to incorporate these image labels, to refer to FIG. Labels f and f' , and to correct the reference to labels L_1 and L_2 to read D_1 and D_2 , so as to correspond to the drawing figure.

FIG. 4 was amended to remove the best entry point labels.

FIGS. 5 and 7 were replaced with flowcharts with reference numbers identifying the steps, and the corresponding text on pages 12-13 and 14 of the specification was amended to incorporate these reference numbers.

Applicant urges that the drawing figures and corresponding description now correspond to each other, and are not confusing.

FIGS. 1 and 5 illustrate different embodiments of the invention. FIG. 1 illustrates needle placement by visual servoing in 3 successive planes, using 2 views, while FIG. 5 illustrates a method for a method for finding the best entry point for percutaneous procedures. The method of FIG. 5 forms the subject matter of claim 1, and is distinct from the subject matter illustrated in FIG. 1, although it can be used in conjunction with

the subject matter illustrated in FIG. 1. Applicant urges that claim 1 is enabled by the description of FIG. 5. Reconsideration and withdrawal of these section 112 rejections are respectfully requested.

Section 112, paragraph 2 Rejections:

Claim 1 was rejected under 35 U.S.C. §112, 2nd paragraph as being indefinite for the reasons presented above.

Applicant urges that, with the amendments made in connection with the enablement rejection, claim 1 is not indefinite.

Claim 1, and corresponding FIG. 5, are quite clear and explicit in the recitation steps for *determining the best entry point for a percutaneous procedure, given a primary target for biopsy and a secondary target through which a biopsy needle must pass on its way to said primary target*. Reconsideration and withdrawal of this section 112 rejection are respectfully requested.

Section 103 Rejections:

Claim 1 was rejected under 35 U.S.C. §103(a) as being obvious over U.S. Patent No. 5,799,055 (Peshkin, et al.)

Applicant respectfully traverses this rejection.

Applicant urges that the Examiner has failed to make out a *prima facie* case of obviousness for these rejections. To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the combination of prior art references must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure.

Peshkin is directed to a system and method for using 2 fluoroscope images to guide a surgical procedures. Specifically, Peshkin's written description discloses that the 2 images are an anterior/posterior (A/P) image and a sagittal image. Although Peshkin does acknowledge the importance of positioning the end point of the device (Col. 1, lines 25-30), Peshkin nowhere discloses a method *for determining the best entry point for a percutaneous procedure, given a primary target for biopsy and a secondary target through which a biopsy needle must pass on its way to said primary target*, as recited in claim 1. Peshkin discloses, *inter alia*, registering the A/P and sagittal images to the patient's body, displaying fiducials of one image on the other image, receiving user input to select an entry point on one image to define a virtual guidewire, and to receive user input to change a parameter characterizing the virtual guidewire. Peshkin also discloses selecting an entry point of a guidewire in the A/P image, moving the top and bottom points of the guidewire, correcting spatial distortions resulting from the fluoroscope optics, registering the A/P and sagittal images, and displaying points chosen on one image in the other image.

However, Peshkin fails to disclose or suggest a method *for determining the best entry point for a percutaneous procedure, given a primary target for biopsy and a secondary target through which a biopsy needle must pass on its way to said primary target*, that includes *selecting a first arbitrary entry point on a patient; selecting a second arbitrary entry point on said patient, different from said first arbitrary entry point; determining the three dimensional (3-D) orientation of said needle at said first arbitrary entry point for pointing said needle at said primary target; determining the 3-D orientation of said needle at said first arbitrary entry point for pointing said needle at said secondary target; determining the 3-D dimensional orientation of said needle at said second arbitrary entry point for pointing said needle at said primary target; determining the 3-D orientation of said needle at said second arbitrary entry point for pointing said needle at said secondary target; determining a 3-D line representing the intersection of a first plane containing said first arbitrary entry point, said primary target point, and said secondary target point, and a second plane containing said second arbitrary entry point, said primary target, and said secondary target point, whereby said 3-D line provides a*

position and orientation for said needle for performing needle biopsy of said primary target through said secondary target, as recited in Applicant's claim 1. The Examiner only generally refers to Peshkin as disclosing a method for determining the insertion point and angle of approach of a needle into the body, but does not otherwise provide any specific references to those features of Peshkin present in the method recited in Applicant's claim 1.

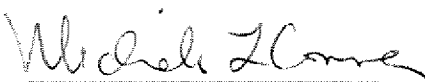
The Examiner concedes that Peshkin does not explicitly disclose selecting and determining steps defined in the claim, but contends it would be obvious to do so. However, as noted above, Peshkin fails to disclose any of the limitations of Applicant's claim 1. Thus, Applicant urges that claim 1 is not obvious over Peshkin. Reconsideration and withdrawal of this section 103 rejection are respectfully requested.

For the same reasons, Applicant urges that new independent claim 11 is not obvious over Peshkin.

CONCLUSION

Applicant urges that claim 1 and new claim 11 are in condition for allowance for at least the reasons stated. Early and favorable action on this case is respectfully requested.

Respectfully submitted,

By: 
Michele L. Conover

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